



Planning &
Environment

Study Requirements

*Redfern-Waterloo
Authority Sites
(North Eveleigh
West)*

*State Significant
Precinct*

July 2017

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Introduction

The Redfern-Waterloo Authority Sites State Significant Precinct (SSP) contain large areas of government-owned land and is an area of state importance in achieving key government policy objectives, particularly those relating to increasing delivery of housing and jobs.

The Department has issued study requirements for the North Eveleigh West site, within the Redfern-Waterloo Authority Sites SSP.

The Study Requirements for the nominated precinct have been prepared in consultation City of Sydney Council and relevant State agencies.

Purpose of study

Investigate preparation of a new planning framework for the North Eveleigh West site, part of the Redfern – Waterloo Authority Sites State Significant Precinct, to facilitate an increase in the existing buildings heights and FSRs to allow development of up to 700 dwellings.

Site

The North Eveleigh West site is an area of approximately 2.9 ha of primarily government owned land located at Wilson Street, Eveleigh.

The site is bordered to the east by the historic Carriage Workshop, the Main Western Rail Corridor to the south, and Heritage Conservation Areas of one and two-storey residential dwellings to the north and west. It is located wholly within the City of Sydney (CoS) Local Government Area and is part of the Central to Eveleigh urban renewal corridor that has been identified by UrbanGrowth NSW.

The site has significant heritage value and the historic Clothing Store forms part of the Eveleigh Railway Workshops complex which is listed on the State Heritage Register.

Applicant

UrbanGrowth NSW.

Date of issue

17 July, 2017.

Scope of study

The following issues will be considered and assessed as part of the study:

- (1) State or regional planning significance of the site;
- (2) Suitability of the site for any proposed land use, and the intensity of any use; taking into consideration the public domain, transport, heritage, arts and culture, environmental, social, health, economic and urban design factors, the principles of ecological sustainable development and any State, regional or local planning strategy, policy or plan;
- (3) Implications of any proposed land use for infrastructure and service delivery;
- (4) Means by which developer contributions should be secured for the site;
- (5) Local and regional economic, social, health and environmental impacts of the proposed development;
- (6) Recommended land uses and development controls for the site;
- (7) Evidence of comprehensive planning for the entire Redfern-Waterloo Authority Sites State Significant Precinct and effective linkages between the Precinct and the surrounding area; and
- (8) Staging strategy for the Precinct in the context of the local area.

Key study requirements

The Study must address the following key requirements:

1. Vision, Strategic Context and Justification

- 1.1 Outline the vision for the proposal.
- 1.2 Outline the strategic planning context for the proposal including an assessment of relevant State planning documents such as:
 - ‘A Plan for Growing Sydney’ (December 2014);
 - ‘NSW Long Term Transport Masterplan’ (December 2012);
 - ‘Draft Central District Plan’ (2016); and
 - ‘The Green Grid – Creating Sydney’s Open Space Network’, NSW Government Architect’s Office; and
 - Draft Climate Change Fund Strategic Plan and A Plan to Save NSW Energy and Money
 - NSW Climate Change Policy Framework
 - NSW Arts and Cultural Policy Framework – *Create in NSW (2015)*
 - ‘Sydney Local Health District – A Picture of Health – Health Profile’ 2015; and
 - ‘Future Directions for Social Housing in NSW (2015)’.
- 1.3 State Environmental Planning Policies (SEPPs) including:
 - State Environmental Planning Policy (State Significant Precincts) 2005;
 - State Environmental Planning Policy (Urban Renewal) 2010;
 - State Environmental Planning Policy No 65 (Design Quality of Residential Apartment Development) 2015; and
 - State Environmental Planning Policy (Affordable Rental Housing) 2009.
- 1.4 Consideration of local planning and other relevant City of Sydney strategies and reports including:
 - ‘Sydney Local Environmental Plan’ 2010;
 - ‘Sustainable Sydney 2030 Community Strategic Plan’ 2014;
 - Environmental Action 2016 – 2021 Strategy and Action Plan’;
 - ‘Connecting Out City – Transport Strategies and Actions – Summary Report’;
 - ‘Adapting for Climate Change’ 2015;
 - ‘A City for All - Social Sustainability Policy and Discussion Paper, June 2016’ June 2016;
 - Open Space, Sports and Recreational Needs Study 2016;
 - Public Domain Manual;
 - Sydney Streets Code 2013;
 - Cycle Strategy and Action Plan 2007-2017;
 - Walking Strategy and Action Plan
 - Eora Journey Economic Development Plan 2016
 - Interim Floodplain Management Policy 2014
 - Landscape Code 2016;
 - Greening Sydney Plan 2012;
 - Urban Forestry Strategy 2013;
 - Tree Management Policy 2013;
 - Urban Ecology Strategic Action Plan;
 - Street Tree Master Plan 2015
 - Creative City I Cultural Policy and Action Plan 2014;
 - Legible Sydney Wayfinding Strategy 2012;
 - Legible Sydney Design Manual 2013;

- Urban Ecology Strategic Action Plan 2014;
 - Decentralised Water Masterplan 2012;
 - Tourism Action Plan (December 2013); and
 - Visitor Accommodation Action Plan (June 2015)
 - NSW Health’s Health Impact Assessment: A Practical Guide; and
 - NSW Health Building Better Health Guidelines.
- 1.5 Provide justification for the proposal in the context of the draft Central District Plan and planning for the broader area.
 - 1.6 Outline how the proposal considers the interface with future land uses in the surrounding area.
 - 1.7 Outline the historical significance of the site and how the proposal intends to be sympathetic to the heritage items, views and context within and adjacent to the Precinct.

2. Urban Design

- 2.1 Prepare a detailed site and context analysis.
- 2.2 Prepare opportunities and constraints mapping.
- 2.3 Prepare a detailed analysis of the proposal against the approved Concept Plan (as modified). The analysis should outline the differences relating to floor space, density, land use, number of dwellings, car parking, vehicle access, building location, footprints, height, residential and non-residential GFA, public open space and affordable housing.
- 2.4 Prepare a set of urban design principles that underpin the proposed development.
- 2.5 Prepare a precinct plan that integrates the: public domain plan, infrastructure plan, staging plan, building types and massing for the site.
- 2.6 Provide a view and visual assessment, with particular focus on significant view lines to the Clothing Store and Carriage Workshop buildings, as well as analysis of any visual impacts on surrounding areas and mitigation measures. Use eye level views from public parks and street footpaths, compare to existing views and analyse the relative quantity of visible sky. Include analysis of any visual impacts on the significant heritage items, surrounding homes and any mitigation areas. Provide a map identifying all chosen view lines as previously agreed and agree any additional view lines with the Department.
- 2.7 Provide a shadow and sun access (at the winter solstice) analysis both within the site, addressing open space and dwellings, and on adjoining land for the new public parks; and, new and existing private open space and dwellings, against standards in the Apartment Design Guide for apartments and the Sydney Development Control Plan 2012 for open space and residential buildings not subject to the Apartment Design Guide
- 2.8 Provide an analysis of proposed distribution of gross floor area, development yields, building typologies, building envelopes and heights.
- 2.9 Provide sufficient detail of the building types to demonstrate future compliance with amenity standards including the Apartment Design Guide and to support any calculations that convert building envelopes to gross floor area and development yields
- 2.10 Outline urban design principles for the proposal and demonstrate how they have informed the allocation of, and relationships between proposed land uses.
- 2.11 Provide a 3D massing model in Revit, Sketch Up or similar, a fly through and photomontages of key sites.
- 2.12 Provide physical and 3D CAD models to fit the City of Sydney’s physical and 3D CAD model. Include animations and photomontages of key parts of the proposal from eye level positions in the public domain. Consult with the City of Sydney to confirm technical model requirements.
- 2.13 Develop a design excellence approach that utilises a competitive design process and excellent design outcomes.

- 2.14 Outline draft SEPP controls with a block by block approach to permissible height and FSR (including residential and non-residential split) with all schedules/calculations provided for each individual block.
- 2.15 Prepare a draft DCP, design code or the like, in a form to be integrated with the Sydney DCP 2012, including appropriate development controls to inform future development of the precinct including: public domain, street hierarchy and typologies, connectivity, car parking, accessibility, building footprints, detailed building heights including street frontage and podium, setbacks, building typologies, private open space, space for waste management, sun access, public art, heritage and heritage interpretation.
- 2.16 Demonstrate interface between the development lots and Carriageworks site will be managed including, but are not limited to: emergency access and servicing, building entries, setback requirements to the lot boundary, noise management and other impacts (refer to Apartment Design Guide standards).
- 2.17 Document how the proposal will achieve a healthy built environment and active health lifestyles for residents including consideration of the relevant guidelines including *Healthy Built Environment Checklist*; *Health Impact Assessment: A Practical Guide*; and *Building Better Health Guidelines*.

3. Public Domain

- 3.1 Consult closely with and obtain endorsement, for the extent that it relates to the approval of the planning framework, the City of Sydney for all aspects of the Public Domain as the ultimate owner and manager of the Public Domain.
- 3.2 Provide a Public Domain Plan identifying proposed public parks and streets, including an accurate CAD set-out of streets, parks and open spaces.
- 3.3 Demonstrate how accessibility to the new park is maximised by surrounding street interfaces, and location in relation to slope; and how the flexibility and extent of use is maximised by locating away from busy roads, noise and pollution, how size is suitable for the number and type of users, and location in relation to existing parks optimises use for the surrounding community.
- 3.4 Provide a layout plan of the public streets, lanes and walkways, identifying street hierarchy, typologies, movement patterns for all modes of travel, connectivity to the surrounding area and the development lots. Provide detailed sections and plans for typical conditions in each type of street, demonstrating innovative and best practice design for high density, highly connected, and active transport priority environments.
- 3.5 Provide a general arrangement plan for streets locating proposed kerb alignments, including intersection arrangements and mid-block crossing arrangements, overlaid with existing and future ownership boundaries.
- 3.6 Provide a (Water Sensitive Urban Design) WSUD strategy that integrates with the flood study, the public domain and private open spaces, show any measures on plans and detail street sections
- 3.7 Demonstrate how the public domain will be designed to be legible, connected and safe for pedestrians and cyclists at all times of the day and night, considering Crime Prevention through Environmental Design (CPTED) principles.
- 3.8 Demonstrate how the public park will provide suitable and sufficient access for residents to recreational facilities in conjunction with accessible facilities in the wider neighbourhood and the region.
- 3.9 Provide an indicative material and furniture palette for the park and various street types.

NOTE: In all of the above, demonstrate consideration and application of City of Sydney public domain codes where appropriate, including the Streets Code and Technical Specifications, Legible Sydney Wayfinding Strategy and Design Manual, and any other relevant City of Sydney draft Codes.

4. Land Use and Planning Controls

- 4.1 Explain the zoning pattern proposed and provide justification for the mix and location of proposed land uses.
- 4.2 Provide draft zoning and planning controls to amend State Environmental Planning Policy (State Significant Precincts) 2005 including zoning, maximum building height, FSR, design excellence, car parking and heritage maps.
- 4.3 Justify the proposed controls and explain the methodology adopted to ensure amenity standards, infrastructure provision objectives, and appropriate transitions to adjoining heritage items and conservation areas are achieved. Detail and provide justification for the mix and location of proposed and existing land uses having specific regard to acoustic compatibility between noise generating and noise sensitive land uses.

5. Heritage

- 5.1 Prepare an heritage assessment that investigates the history, physical evidence and significance of the features within the study area, based on a site inspection and documentary research, to identify and conserve features of local or greater heritage significance.
- 5.2 The heritage assessment is to be undertaken in accordance with guidelines set out in the NSW Heritage Manual, the methodology described in "The Conservation Plan" (J S Kerr 1996) and in the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter).
- 5.3 Provide a thematic environmental history for the precinct within the context of the Eveleigh Railway Workshops (SHR no. 01140).
- 5.4 Provide a Statement of Heritage Impact in accordance with the State of Heritage Impact guide which:
 - identifies and assesses any direct and/or indirect impacts (including cumulative impacts) to the heritage significance of the Eveleigh Railway Workshops (SHR no. 01140), Eveleigh Railway Workshops machinery (SHR no. 01141), heritage items and conservation areas in the vicinity of the site;
 - addresses compliance with the policies of the conservation management plan; and
 - addresses the height, density, bulk and scale, and setbacks of the proposal in relation to the locality and the surrounding development, topography and streetscape, having particular regard to its relationship with significant buildings, machinery and fabric of the Eveleigh Railway Workshops and Eveleigh Railway Workshops machinery.
- 5.5 Provide a conservation management plan for the North Eveleigh West precinct, addressing the State Heritage Register (SHR) listed item Eveleigh Railway Workshops (SHR no. 01140).
- 5.6 Address how the proposal considers and is sympathetic to the broader Sydney Trains Heritage Asset Management Strategy.
- 5.7 Provide recommendations for the management of heritage significance – to guide future development or planning to retain the assessed significance of features, including features to retain and re-use, treatment of specific spaces and fabric of significance, view corridors, setbacks and heights for new development in the vicinity, photographic archival recording or oral histories.
- 5.8 Provide an interpretation plan having particular regard to the precinct's relationship with nearby heritage items in accordance with Interpreting Heritage Places and Items Guidelines. Reference could be made to Opportunities for Interpretation in the Central to Eveleigh Corridor Final Report for UrbanGrowth NSW April 2015 prepared by AHMS.

- 5.9 The interpretation plan must demonstrate how the historical significance of the World War II air raid shelters and associated metal tanks are incorporated in the heritage interpretation of the site, noting City of Sydney Council's preferred heritage outcomes for the items. The interpretation plan should also address the traversers and the traverser trolleys.
- 5.10 Provide a landscape and public domain master plan and a heritage assessment on the landscape and public domain having particular consideration of to its relationship with significant buildings, machinery and fabric of the Eveleigh Railway Workshops and Eveleigh Railway Workshops machinery, moveable heritage and the interpretation plan.
- 5.11 Provide a strategy for public domain, machinery, moveable heritage and interpretation to ensure these elements of Eveleigh Railway Workshops area are managed collectively.
- 5.12 Provide a detailed Visual Impact Assessment demonstrating how the development would affect significant views to and from the Eveleigh Railway Workshops including to and from the Carriageworks, Australian Technology Park, south Eveleigh Precinct and the adjacent heritage conservation areas.

6. Historical and Archaeological Impact Assessment

- 6.1 Prepare an Historical and Archaeological Impact Assessment to identify and describe the archaeological potential of the site and assesses the impact of the proposal on any aboriginal and non-aboriginal archaeology within this site and outline any proposed management and conservation measures to protect and preserve archaeology;
- 6.2 The study should examine Aboriginal cultural heritage values that exist across the wider area that will be affected by the development and document these in the study. This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).
- 6.3 Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the study.
- 6.4 Impacts on Aboriginal cultural heritage values are to be assessed and documented in the study. The study must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the study must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.
- 6.5 Prepare the required DCP provisions.

7. Public Art

- 7.1 Prepare a public art plan that:
 - Is authored by a professional curator with experience and knowledge of the area;
 - Is developed in consultation with the City of Sydney, the City's Public Art Advisory Panel, Create NSW, key cultural stakeholders and the community;
 - Allows for individual, meaningful and iterative one on one consultation with the above groups;
 - Identifies opportunities and an overarching conceptual approach/curatorial rationale for the wider precinct;
 - Proposes a sound methodology for the selection, commissioning and delivery of public art as part of future development applications in a way that ensures the strategic intent,

vision, artistic integrity and quality of all public artworks is maintained throughout this process;

- Ensures that adequate checks and balances are in place to achieve best practice outcomes;
- Outlines a budget for public art that allows for best practice outcomes that will contribute to the future public life in Redfern-Waterloo; and
- Clarifies the lifespan of the artwork and process for decommissioning as well as ownership, funding and responsibility for ongoing maintenance of all artworks.

7.2 Demonstrate how it is consistent with:

- The City of Sydney's Public Art Strategy, Public Art Policy, Guidelines for Public Art in Private Developments and Guidelines for Acquisitions and Deaccessions.
- Create in NSW – NSW Arts and Cultural Policy Framework.

8. Traffic and Transport

8.1 Prepare a comprehensive transport impact assessment to understand transport network context, service and network limitations, opportunities for improving customer experience and transport solutions that will accommodate planned growth through integrating land use and transport, and better managing travel demand. A methodology to be agreed with Transport for NSW (TfNSW) and Roads and Maritime Services (RMS). The assessment should include, but not be limited to:

- A broad review of the existing and future land use and transport context within the study precinct, access and connectivity with assessment of the overall precinct and its relationship to the surrounding transport network and land uses;
- Appraisal of current site travel mode share including walking, cycling, public transport and private vehicles;
- Consider access to key destinations and infrastructure in the local area, in particular schools, community facilities and other local services;
- The safety of all road users, in particular pedestrians and cyclists;
- Consider performance of the existing and future cycling, public transport and road network surrounding the precinct, taking account of the study area (study area agreed in consultation with TfNSW and RMS);
- Consider existing trip generation by mode, based on the current land use and transport context, including walking, cycling, public transport, taxi, ride share and private vehicles;
- Review the trip generating potential for all modes and purposes associated with the proposal; Trip generation rates are to be agreed by TfNSW and Roads and Maritime Services;
- Consider active transport opportunities within, to, and from the precinct. This should include identification of any opportunities to locate, fund, and deliver pedestrian connections across the rail corridor as part of the project;
- Consider cumulative growth of surrounding area based on committed and planned developments and proposed infrastructure (such as WestConnex, and associated projects);
- Consider impact of additional travel demands (across all modes) on the transport network serving the site; Benchmark the travel mode share and trip generation profile for all modes of a development site of similar scale and geographic context;
- Provide an understanding of the travel behaviours and patterns (across all modes) of future residents, workers and visitors of the proposal through benchmarking, forecast modelling tools and other sources of evidence; Develop a traffic model to determine the road network improvements required to support the proposal; (scope, parameters and

methodology to be agreed with TfNSW and Roads and Maritime Services and should be carried out in accordance with RMS Traffic Modelling Guidelines 2013);

- Prepare intersection models (SIDRA) to demonstrate the safe operation and functionality of key intersections including Queen Street/Wilson Street and its relationship with the approved Wilson Street cycleway and footpath improvements project;
- Consider the role of shared vehicles in managing travel demand and provide any recommendations for implementation of shared vehicle solutions;
- Benchmark and provide recommendations for appropriate parking rates that are cognisant of the future customer needs and available capacity in the nearby transport system;
- Detail the access and egress requirements in accordance with RMS and CoS guidelines and relevant Australian Standards;
- Detail the transport infrastructure and servicing improvements, including identification of both land (corridor preservation) and capital components, to support the proposal including costings and funding responsibilities;
- Identify travel demand management measures to promote sustainable mode of travel and achieve mode share targets;
- Prepare the required DCP provisions (including the access strategy); and
- Provide an overview of potential impacts of construction traffic on potential future development. Identify a strategic construction approach, including identification of potential staging that broadly outlines the construction footprint and construction related traffic access.

9. Ecologically Sustainable Development (ESD)

- 9.1 Provide an Ecologically Sustainable Development Report which details how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the construction and ongoing operation phases of the development to achieve sustainability best practice initiatives.
- 9.2 Document how waste water and energy consumption and can be reduced and where possible these resources can be recycled. Demonstrate the feasibility of a recycled water system for both dwellings and the public domain identify appropriate measures to ensure its implementation including threshold number of dwellings/floorspace and method of implementation and responsibility for funding implementation. Justify timing of proposed water recycling including costs, benefits and mechanism for implementation. Provide details of any proposed future connection to a recycled water network along the Central to Eveleigh Corridor including details of the environmental and economic value of installation of recycled water piping for future commissioning.
- 9.3 Identify and implement waste management strategies to achieve NSW Government's Waste Avoidance and Resource Recovery Strategy 2007 (WARR) and compliments the NSW Government's Waste Less, Recycle More initiatives and EPA waste and recycling programs. This must include precinct scale measures to ensure effective operational waste management. In developing the above information, the proponent should also ensure the following guidelines are consulted: The Better Practice Guide for Waste Management in Multi-Unit Dwellings (DECC 2008); the Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities (EPA, December 2012); and the Better Practice for Public Place Recycling (DEC 2005)"
- 9.4 The management of waste should be discussed with the City of Sydney Council and the outcome of these discussions documented to ensure the site and proposed yields can be appropriately serviced by Council

- 9.5 Demonstrate how biodiversity has been considered for the proposal and consider the objectives and targets outlined in City of Sydney Council's urban ecology and strategic action plan. Consider ways to promote links to other green areas.

10. Climate Change Mitigation and Adaptation

- 10.1 Undertake a sustainability assessment of the proposal, reflecting the directions outlined in the 'NSW Climate Change Policy Framework', October 2016, and draft Central District Plan "Creating an efficient Central District" to achieve net-zero carbon emissions by 2050. Options for achieving both net zero buildings and a net zero precinct should be considered.
- 10.2 Provide a Climate Change Adaptation Report which details how the proposal will address temperature increases from climate change (see NSW and ACT Regional Climate Modelling: NARCLIM), including the integration of vegetation (existing and future), permeable and reflective surfaces, and Water Sensitive Urban Design features into the design of the development.
- 10.3 Undertake sensitivity analysis to address the impact of climate change due to increased temperatures, extreme heat events and increase of rainfall intensity integrated with the Water Quality, Flooding and Stormwater Study.
- 10.4 Demonstrate consideration of the Urban Green Cover in NSW Technical Guidelines (OEH, 2015).
- 10.5 Demonstrate compliance with BASIX and investigate opportunities to deliver beyond-BASIX scores.

11. Utilities

- 11.1 Provide a utilities and infrastructure servicing report identifying existing capacity, required capacity and augmentation needed for the proposal, sustainability measures (e.g. Water Sensitive Urban Design (WSUD) and staging. The water utilities component should be prepared by a suitably qualified hydraulic consultant. The power utility requirements should be prepared by a suitably qualified (ASP) consultant.
- 11.2 The utilities and infrastructure servicing report should outline the development yield and staging and should include a high level assessment of the capacity of:
- Ausgrid electrical network to service the development and outline the likely impacts on the broader Ausgrid electrical network. This will include direct engagement with Ausgrid on the high level impacts to ensure early understanding and visibility of any network augmentation required; and
 - Sydney Water's network to service the development and the proposed servicing options considered for the development. The report should also outline any integrated water cycle management and / or sustainability initiatives proposed for the development, including any proposed alternative water supply, proposed end uses of drinking and non-drinking water and proposed water conservation measures.

12. Local Infrastructure and Contributions

- 12.1 Outline the future community profile in age groups and time series format of the North Eveleigh West Precinct and provide a needs analysis.
- 12.2 Outline the proposed local infrastructure, including recreation, open space (active and passive), community and educational facilities required to meet the characteristics and likely needs of the future population, including the estimated costs and timing of the works.

- 12.3 Outline how the proposed local infrastructure including open space/connections, community and educational facilities will meet the needs of the future population, including demonstrating how specific locational, functionality and design, servicing, and accessibility requirements will be met.
- 12.4 Outline the proposed ongoing responsibilities and maintenance of any proposed open space/connections, drainage reserves, and community facilities.
- 12.5 Outline details of any arrangements with Council for public use of community facilities.
- 12.6 Outline the scope and mechanism/s for development contributions meets the needs of the future population having regard to existing contributions plans.

13. State and Regional Infrastructure

- 13.1 Outline the impact of the proposal on State infrastructure, including public transport, roads, hospitals and schools required to meet the characteristics and likely needs of the future population, including the estimated costs and timing of the works.
- 13.2 Outline the scope and mechanism/s for development contributions between the Proponent and infrastructure agencies, such as transport, education and health, for infrastructure that meets the needs of the future population having regard to the infrastructure schedule and the City of Sydney Council's existing contributions plans

14. Economic feasibility

- 14.1 Provide an analysis of the market demand for the proposal.
- 14.2 Provide an assessment of the development feasibility of the proposal.
- 14.3 Provide an economic assessment of the proposal, including the likely wider economic benefits in relation to employment, commercial and retail impacts.
- 14.4 Undertake an economic analysis testing feasibility of future development to contribute towards local, State and regional infrastructure.

15. Geotechnical and Contamination

- 15.1 Provide an assessment of the local soil, outlining its suitability for the proposed uses with respect to erosion, salinity and acid sulphate soils.
- 15.2 Provide an assessment of the proposed land uses in accordance with State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55).

NOTE: In cases where land is potentially contaminated, the investigation and any remediation and validation work is to be carried out in accordance with guidelines made or approved by the EPA under Section 105 of the Contaminated Land Management Act 1997 and be in accordance with the requirements and procedures in the Contaminated Land Management Act 1997, Contaminated Land Management Regulation 2013 and SEPP 55 – Remediation of Land.

16. Water Quality Flooding and Stormwater

- 16.1 Provide an assessment of any potential impacts of the proposal on the hydrology and hydrogeology of the urban renewal precinct and adjoining areas, with particular focus on water quality, the extent to which development protects, maintains or restores water health and the community's environmental values and use of waterways for Sydney Harbour (also known as the NSW WQO). Consider water quality targets in Sydney DCP 2012:

- Reduce the baseline annual pollutant load for litter and vegetation larger than 5mm by 90%,
 - Reduce the annual pollutant load for total suspended solids by 85%,
 - Reduce the baseline annual pollutant load for total phosphorus by 65%,
 - Reduce the baseline annual pollutant load for total nitrogen by 45%.
- 16.2 Provide a concept Stormwater Management Plan outlining the general stormwater management measures for the proposal, with particular emphasis on possible WSUD options..
- 16.3 Provide details of, and an assessment of impacts of the proposal on watercourses, wetlands and riparian land on an adjoining the urban renewal precinct.
- 16.4 Provide a flood risk assessment developed in consultation with City of Sydney Council identifying flooding behaviours for existing and developed scenarios in order to outline the suitability of the land for proposed uses.
- 16.5 Consider the future cumulative flood risk impact across the catchment area and adjoining land areas.
- 16.6 Provide recommendations regarding the most appropriate emergency response strategy to manage risk to life.
- 16.7 Provide concept level details of the drainage associated with the proposal, including stormwater drainage infrastructure and address the impact of stormwater flows on the site from other catchments.

17. Affordable Housing

- 17.1 Justify the amount of affordable housing provided in the context of existing and previous housing affordability schemes for the site and provide reasons for any changes.
- 17.2 Demonstrate how the proposal is consistent with NSW Government's commitment to delivering more Affordable Housing in 'A Plan for Growing Sydney' and the affordable rental housing target of 5% to 10% of new floorspace highlighted in the draft Central District Plan, particularly for government led urban renewal projects.
- 17.3 Assess the feasibility of the proposal to contribute to Affordable Housing and the preferred mechanisms for delivery.

18. Noise, Vibration and Pollution

- 18.1 Provide a noise and vibration impact assessment for the proposal. The assessment will address the relevant policies and guidelines in relation to noise including State Environmental Planning Policy (Infrastructure) 2007 and the Development Near Rail Corridors and Busy Roads – Interim Guideline. The vibration assessment should be undertaken in accordance the *Assessing vibration: a technical guideline (DEC, 2006)* available at: www.epa.nsw.gov.au/noise/vibrationguide.htm
- 18.2 Consider and assess potential pollution impacts from the proposed rezoning including, but not limited to, water, air, noise and light pollution and Including the impact on, and of, adjoining land uses and strategies for noise abatement of adjoining land uses.
- 18.3 Provide an air quality assessment for the proposal. The assessment will address the relevant policies and guidelines in relation to air quality including State Environmental Planning Policy (Infrastructure) 2007 and the Development Near Rail Corridors and Busy Roads – Interim Guideline.
- 18.4 Identify and map current and proposed future sensitive receptors (eg residential uses, schools, child care centres).

- 18.5 Identify current and likely future noise, vibration and pollution affecting the precinct, including sources and nature and impact. Site monitoring will be required to determine current noise levels from the train line. 3D mapping to clearly communicate these impacts, including demonstrating for example how noise reduces with distance from source, is desirable.
- 18.6 Model the likely future noise, vibration and pollution scenario based on 3D block envelope diagrams prepared by the urban designer. This is to include road and rail noise.
- 18.7 Recommend appropriate noise and vibration measures. The consultant is expected to work with the urban designer, and suggested measures are provided for the protection of future residents of buildings through the careful siting and layout of buildings maintaining natural ventilation through open windows.
- 18.8 Outline the recommended measures relating to noise, vibration and pollution to minimise the nuisance and harm to people or property within the precinct.

19. Wind

- 19.1 Provide a complete understanding of the existing wind characteristics of the precinct. Consider the wind climate of Sydney, local characteristics such as topography that modify this wind climate for the precinct and the impact of existing buildings, in particular the tower and slab blocks, on wind conditions.
- 19.2 Identify significant locations for wind sensitivity within the public domain, including, public parks and other public domain areas for the purpose of modelling wind impacts of the proposed development.
- 19.3 Ensure consideration of potential wind impacts and amelioration approaches through the layout and arrangement of the public domain and the built form.
- 19.4 Advise on measures to ensure the suitability of areas for their intended use with regard to the impact of wind on comfort and safety. In particular, this is to focus on the public space areas intended to be used for seating (i.e. the park, outdoor dining areas on footpaths and public plazas) and standing (i.e. building entries); and, also for outdoor private recreation areas to be suitable for sitting (e.g. balconies, decks and outdoor communal private open space). Advise on the placement, orientation, shape and external design of buildings, and relevant wind mitigation devices.
- 19.5 Any advice on landscaping of public space must accord with the City of Sydney's Public Design Manual and the Public Domain design. In general landscaping can only be used for wind mitigation if it is already in place.
- 19.6 Include areas surrounding the precinct that may be wind affected as a result of the proposal.
- 19.7 Undertake an assessment to demonstrate that subject to any recommended measures, wind will not have an unacceptable impact on the proposal, and the proposal will not generate unacceptable wind impacts.
- 19.8 Wind tunnel testing is required.

20. Aeronautical

- 20.1 Review relevant background information, including the "Sydney Airport Master Plan 2033" to understand the current and proposed future operations of Sydney Airport, as relevant to the precinct.
- 20.2 19.2 Identify and clearly map the OLS, PANS OPS and any other relevant Sydney Airport height limitation layers, including consideration of Navigation Aid Surfaces.

- 20.3 Translate these layers into a maximum height for permanent (e.g. buildings) and temporary (e.g. cranes) structures include a building methodology specialist to translate this information into maximum building envelope height planes.
- 20.4 Advise on other measures, if necessary, to ensure the precinct does not have an adverse impact on the operations of Sydney airport, e.g. lighting, reflective surfaces etc).
- 20.5 Advise on the pathway required to secure approval from relevant bodies, e.g. Air Services Australia, as part of subsequent development application processes, including for temporary structures such as cranes.
- 20.6 Certify that subject to any recommended measures, the precinct proposal will not have an adverse impact on the operations of Sydney Airport.

21. Staging

- 21.1 Outline the proposed staging of the North Eveleigh West precinct and adjacent development proposals including the overall Central to Eveleigh Urban Transformation Area.

22. Consultation

- 22.1 During the preparation of the study undertake an appropriate and justified level of consultation with Council, other relevant State and Federal government agencies, non-government service providers and community stakeholders.
- 22.2 Provide a summary of and outline the general outcomes of early consultation and how the outcomes have been incorporated into the proposal.
- 22.3 Consultation is to address key aspects of the proposal including spatial arrangement of development, staging, open space, amenity, transport, and community facilities.
- 22.4 Provide evidence of consultation (including letters, minutes of meetings, charrette/drop in event summaries and formal advice) with Council, government agencies and adjoining land owners.
- 22.5 Outline the proposed community consultation strategy, noting and addressing that Council should have a high level of involvement throughout the process.
- 22.6 Adequate and ongoing consultation with the local Aboriginal community is recommended for all heritage assessments.